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The Relation of Tonsillitis to Rheumatism.



BY

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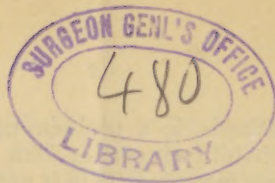
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THE RELATION OF TONSILLITIS TO RHEUMATISM.

I am aware that I present on this occasion no new topic for your consideration, and am sure you might ask very properly, what profit can possibly grow out of its discussion. And yet we are all aware there are many simple questions in medicine not yet fully understood, and it is better to well develop those first, before we make an attempt to penetrate into the more intricate. It is also well to remember that all questions in medicine tend towards one end; that the lesser is contained in the greater, and in developing the simple we gain an insight into the more complicated.

The relation of tonsillitis to rheumatism is a very plain question, and needs no especial treatment for its elucidation. There are many stranger things in our experience than the association of such diseases, and however paradoxical it may at first appear, there are but few present, who, if they would think over their cases, would not call to mind numerous instances where these two apparently distinct affections came so closely together, or were combined in the same patient so intimately as to give no doubt of their etiological relations, though at the time treated as distinct diseases.

There can be no doubt there is a connection between tonsillitis and rheumatism, the subjects of which are also in a more or less degree rheumatic subjects, but whether they have the rheu-

matic diathesis, is a problem not easily solved. In all probability it carries with it also this distinguishing feature. This is proven not only by the diagnosis, but also by the treatment. Remedies applicable to, and which in the main cure rheumatism, cure tonsillitis, and *vice versa*. I might add also, that the same exciting cause apparently operates in the production or development of either disease, namely "catching cold."

But we are far from being correct, however, when we say that "catching cold" is only the exciting cause of either tonsillitis or rheumatism. So far as our present knowledge goes we are not in a position to affirm that tonsillitis or rheumatism originates *de novo*, either from a previous constitutional disturbance, or from an external exciting cause only. It is generally believed that constitutional predisposition is necessary, but whether this opinion is correct, whether this state of the system is accidental, or the effect of a rapid development of some special atmospheric contamination, some specific germ absorbed through, or by the alimentary tract, there is still some ground for doubt. We know that after exposure to wet, and cold, under some contributing circumstances, as depression, or general malaise, an attack is occasioned either of the one or the other, or of both combined. We do not stop to consider whether the affection was already absolutely in the system waiting for something to develop it, but at once begin to treat manifest symptoms presented to us by the inflammatory condition of either the tonsils, or the fibrous structures about the joints.

As we cannot then positively affirm, that either disease has simply or only, either an external or internal origin, if either may develop in a previously healthy person, after exposure to wet and cold, we can easily reconcile other seeming dis-

crepancies between them, as to symptoms, as well as to cause and effect. If we consider the tonsils as primarily organs of absorption, and not differing materially from the general lymphatic system, through which morbid material may enter the economy, it is very fair to conclude that such material may cause inflammatory action in its passage, or by arrest in their tissues, if afterwards, by continued absorption through the neighboring lymphatics, which converge towards the tonsils it sets up a more general febrile condition, locating itself, or its greatest force upon some of the fibrous structures of the joints, or producing some other widespread quite as definite febrile disorder.

It has been demonstrated that the material in quite a number of septic diseases enter the system through the crypts of the tonsils, and have their primary manifestation there, and there is no doubt that such is the case, though perhaps this formula may be extended or modified by adding that this function of absorption is shared by the general buccal mucous membrane, though the principal absorption, no doubt, is through the crypts of the tonsils. If the tonsils are absorbing glands to withdraw excess of buccal and pharyngeal secretions, and with them all material normal or morbid there may be mixed with these fluids, it is not to be wondered at that their continued functional action in this direction should make them particularly liable to inflammatory conditions, manifesting such conditions first locally; and the greater the liability and degree of action, the more intense and energetic the morbid material absorbed.

So far we see the relation of tonsillitis to rheumatism as regards its external origin, or its etiology from an external standpoint. We see that the rheumatic nidus, or germ, if I may so call it,

may be a positive external entity, may penetrate into the crypts of the tonsils, may stop there, producing tonsillitis, or may continue its course, originating general rheumatism of the synovial membrane of the joints—a general rheumatic seizure expending its influence, instead of in the tonsils, on the various articulating surfaces. This is not only possible but probable. We know that most inflammatory diseases have an extrinsic cause, and it is not unreasonable to believe there is no exception in the case of either rheumatism or tonsillitis.

Even if we recognize the view that the morbid material exists already in the fluids, and need only the exciting cause to develop it into active life, this does not militate against the part taken by the excitant, the yeast, the ferment, to arouse the dominant affection—for the one is but the faggot, the other the fire that kindles the flame, and in either case the relation may be traced onwards from its incipency, to its conclusion. Whatever may be the theoretical aspect of the subject, however, it is a well known, and simple clinical fact, that after, or during continued exposure to wet and cold, a person may be seized with either tonsillitis or rheumatism, and this is in many cases all we know or is the limit of our knowledge in regard to it.

We surmise, or assume certain things, as to the pathological condition of the blood, and other fluids, whether there is an excess of lactic or lithic acid; but whether this condition originated before or after the exposure, we are at a loss to say,—and we deal with the case according to this theory. If you make a clinical examination of a case of rheumatic tonsillitis you will find no very material or marked difference in the symptoms, and course, from those of an ordinary hyperplastic inflammation of the tonsils. You will find in

rheumatic tonsillitis the induration is more marked, the inflammation is less inclined to suppurate, and the induration and thickening of adjacent paritonsillar tissues more considerable. There is also probably more intense pain and suffering, and its fugacity or tendency to shift position is more observable. But otherwise the case proceeds from the chill or chilly sensation and subsequent fever, to induration and resolution, in the same way that an ordinary hyperplastic tonsillitis would do, but is subject to treatment peculiar to itself. Though the differences in these two varieties of tonsillitis, are not very great, it is well to observe them closely, as very much depends on this observation when we come to the treatment. The difference lies in its mode of attack, the peculiarity of the inflammation, the rheumatic element in its composition, and the therapeutics necessary to arrest it.

I would insist then, in the examination of the many cases of tonsillitis that fall to our lot to treat, upon a proper differentiation in each case, that we remember they assume distinct types, as the rheumatic, and that they often have an intimate relation to a distinct affection, and develop in proportion to a general predisposition. All persons are probably to a greater or less degree predisposed to acute rheumatism (though the predisposition is unequal in different persons); as well as to acute tonsillitis,—but we may usually differentiate rheumatic tonsillitis in that it oftener occurs in robust, full-blooded persons, than in the weak, and anæmic, while other types of tonsillitis attack the strumous and delicate, that it is rare in early childhood, and in old age, is more frequent in the working classes than the well-to-do, that it occurs during the cold, damp weather of winter and spring, and in persons who have had attacks of articular rheumatism, in which its

disposition to shift its position from one synovial capsule to another, and even to the tonsils was apparent, its severity being in proportion to the predisposition and its duration usually more considerably extended.

Having thus in a preliminary way alluded briefly to the more theoretical aspect of the subject, I will relate the history of the two following selected cases as an illustration of some of the relations of tonsillitis and rheumatism.

P. R., female, 23, single, regular, previously in good health, not subject to frequent attacks, but has had tonsillitis before, never had rheumatism. After exposure to wet and cold, on a very inclement day in March while viewing a procession, was seized next day with a very severe attack of tonsillitis. She had high fever, sore throat, dysphagia, swollen tonsils, almost approximating, intense pain of the throat and fauces, pulse 130, temp. 102.5. On the sixth day the inflammation and swelling had subsided and she was apparently well. Two days after the fever returned, the joints of the wrists and elbows, and then one joint after another became implicated, with the cervical region of the spine, making her quite helpless. She had two severe attacks of heart pang and syncope, and was in imminent danger. The attack continued quite six weeks before convalescence began, when her tonsils swelled and became painful again, though in a milder way than the first attack, when the tonsillar trouble with the rheumatism gradually subsided together, —leaving her in a weakened condition.

M. S., female, married, three children, in fair condition, menstruation regular, subject to sub-acute rheumatism for years. Suffers mostly during autumn and early winter. Swelling and pain begin first in the joints of the fingers and wrists, and from that beginning several of the joints suf-

fer but not in regular order, sometimes only two or three, sometimes more. She suffers also from tonsillitis, but not always synchronously with rheumatism. If she had an attack of tonsillitis it wards off an attack of rheumatism, or if rheumatism follows, it is milder; if of rheumatism, the tonsillitis does not occur. There is a compensation between them—the tonsillitis especially modifying the rheumatic attack.

I might relate many cases of similar import, where convalescence from tonsillitis has been considerably protracted by a subsequent attack of rheumatism, either acute or subacute, or the reverse, from which it may be fairly concluded that rheumatism may induce tonsillitis, or tonsillitis rheumatism, under conditions favorable to their development.

An analysis of these cases from a pathological or even an anatomical standpoint, is no easy matter. From what we know of rheumatism we are led to believe it is a painful febrile disease whose seat is in the fibrous tissues—the joints, aponeurosis, sheaths of the tendons neurilemma, periosteum, or in the muscles and tendons, and not due to traumatism; or an inflammatory action of such tissues excited solely by external causes, or by a morbid condition of the circulating fluids, usually demonstrated as an accumulation of the débris of tissue change, or metamorphosis, and principally found in the form of some not well defined acid, as lithic acid, in excess.

There is in the tonsils we may say, as an offset, anatomically, lymph follicles, fibrous and retiform, and peritonsillar connective tissue, which answer in every respect to the fibrous tissue in the joints, and other portions of the body; and if we place the anatomical relations of both in the same category, we cannot be otherwise than struck with the similarity of the symptoms, and

course in both diseases. So that in this respect also, the parallel may be drawn in a way not inconsistent with their relation.

As regards the therapeutics of rheumatico-tonsillar inflammation, it would appear that the alkaline treatment is that which is best indicated. The same treatment indeed that is indicated in general acute rheumatism : bicarbonate of potassa, or soda with Dover's powder, salicylate of potassa, or soda, or salol, internally, with a spray of glyceride of borax and carbolic acid, keeping the bowels open and restricting the nitrogenous diet, with acidulous drinks, is all that is generally required in its management.

The termination of the attack is generally uncertain ; is often protracted, and is very prone to leave a residual complication.

Thus the relation of tonsillitis to rheumatism may be traced pretty clearly by its etiology, its pathology, as well as clinically and anatomically, and also as regards its therapeutics, and in closing this brief sketch, though I am sure very imperfectly, of their relationship, I present the following conclusions as a review of the propositions I have attempted to make :

1. They have probably the same etiological factors.
2. These are not very apparent, but are doubtless represented by some agents, atmospheric in principle.
3. They are equally liable to the same cause.
4. Which may produce one or the other.
5. Their pathology is similar.
6. Their anatomical elements very nearly related.
7. Their symptoms and course very much alike.
8. Their therapeutics allied in every particular.

